Executive report on the development of project management in La Rioja

The Project Economy: challenges full of opportunities and challenges.



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Centro Nacional de Formación en Nuevas Tecnologías



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Preface

In the current context of the energy crisis, with a generalised increase in the price of money, a complex scenario is outlined for companies that requires prudence and the ability to adapt to the new economy, businesses based on information and knowledge, which are the basis of production, productivity and growth in organisations.

Efficiency in management, product development and services are critical to achieve competitive advantage. In this scenario, innovation and project management are indispensable for the optimisation of performance in SMEs. Despite the general international situation, economic forecasts are optimistic for the next twelve months. This is the result of the report 'Perspectivas España 2023', carried out by KPMG in collaboration with CEOE, in which 70% of the entrepreneurs who participated expect an increase in their sales over the year and 50% of them will increase their investments, although it is true that these values are significantly lower than the previous year's survey.

La Rioja is not backward, from the Regional Ministry of Autonomous Development of La Rioja, through the General Direction for Reindustrialisation, Innovation and Internationalisation, we continue to believe that promoting technological innovation projects and services requires a firm commitment to continue advancing in the digital and sustainable transformation.

The training and promotion of management through innovative projects from the National Centre for Training in New Technologies in La Rioja, Think-TIC; the incorporation of qualified human resources through internships; the financing of R&D&I projects and investment in scientific and technical equipment developed by the Technology Centres in the Autonomous Community of La Rioja; the decisive support to clusters and business associations in La Rioja to undertake R&D&I projects are a constant premise to provide solutions to the demands of companies and to promote collaboration between companies and research centres in new challenges that could not be tackled individually. In the first report we already pointed to the evolution of organisations towards a project-based management model, the so-called "project economy", a way of looking at business management in which projects are an essential part of value creation and business transformation.

Technological changes and a new perception of sustainability, reflected in the Sustainable Development Goals (the SDGs of the United Nations), directly concern companies.

At this point, after the last report published in 2020 by this General Direction, the need arises to know the evolution of the level of knowledge and implementation of project-based management in regional companies.

We are aware that we must continue to promote the best practices of project management through initiatives such as the Order of Challenges, the courses and the Think-TIC conferences which have made our region and, by extension, the Association of Project Management Professionals of La Rioja, born from the courses of the Technology Centre, a point of reference in the north of Spain.

Committed to generating original content, in this document we continue on the path of continuous improvement and with the enthusiasm to provide added value with respect to the automatic content generators that have recently emerged from the hand of Artificial Intelligence. Providing answers to questions that would otherwise be only speculation.

> General Direction of Reindustrialization, Innovation and Internationalization



1. Introduction

1.1. Aim of the study

One of the objectives of the Directorate General for Reindustrialisation, Innovation and Internationalisation, hereinafter DGRII, which depends on the Regional Ministry of Autonomous Development of La Rioja, is to observe the evolution and needs of production systems in order to adapt them to the requirements of the business networks in La Rioja.

The DGRII, through the National Training Centre for New Technologies, Think-TIC, has been working for more than 10 years to increase awareness, spread and train project managers and, by extension, the project managers of companies, consultancy firms, administrations and professionals linked to this discipline.

In this sense, the Government of La Rioja works actively to train private sector professionals as well as the administration itself in project management and promotes events of national relevance and international focus for the dissemination of good practices in this discipline, such as the annual Project Management Day.

In 2018, a turning point was reached with the presentation in Spain of the European Commission's PM2 methodology at

in the Think-TIC's own headquarters. As a result of this event, it was considered to work on a first study on the level of regional maturity in project management. The intention was to make an approximation that would serve as a reference for new studies and a starting point for improvement and gaining visibility in Europe.

The initial vision was clearly defined: "to position La Rioja among the most advanced European regions in terms of project management".

This second study is based on the same vision. Integrating the progress made over the last two years, and all the lessons learned, for helping Rioja's organisations to be better prepared for the upcoming changes.

La Rioja is also an open region that wants to learn and teach, without complexes, teaching in order to learn how to learn. For that reason, the results and methodological information are offered openly.



1.2. The Project Economy has already arrived

More and more activities are being carried out in the form of projects rather than as routine tasks in organisations; this is known as projectification.

To illustrate, the estimate for 2019 stated that **41,3%** of **Germany's GDP will be generated through projects** (Schoper et al, 2018). The forecast for **China** in 2022 said that **53% of its GDP would be generated through projects** (Lixiong et al, 2018).

And the trend is upwards. In the case of Germany, annual growth in project-based activities over the period under review was 3%; in the case of China, it was almost 5%.

And this applies to the economy as a whole, to sectors that are used to working through projects as well as to others that are not. This applies to both the private and public sectors.

Projects are of a temporary nature and they allow organisations to become more flexible, innovative and responsive to complex challenges. Therefore, a project-oriented organisation will improve its competitiveness.

Organisations have a permanent character and are generally structured in a hierarchical and functional way. This format was well adapted to the economy of the mid-20th century, with a preponderance of industrial production and a focus on efficiency.

Nowadays, the business environment is more characterised by the need to adapt and change in a context that is developing at a much faster pace. Therefore, projectification is an alternative to increase the adaptability of organisations and respond to their current demands. And according to German and Chinese statistics, this is a trend that is growing in importance.

However, project orientation changes some of the rules of the game. The organisation has to adapt more or less to this way of working. It needs to prioritise, it needs to coordinate, it needs to learn.

It should be borne in mind that more than 80% of projects tend to be internal in nature, i.e. not very evident and, in many cases, more prone to a lack of attention and management.

This need generates initiatives to promote project management skills at all levels. One of the most representative, because of its impact, is the launch in 2018 by the European Commission of its own methodology: PM2 (Project Management Methodology), the ultimate aim of which is to raise the European level of capacity to carry out projects.

The methodology was presented to the Spanish public in La Rioja, at the installations of the National Training Centre for New Technologies, Think-TIC. This presentation marked the beginning of this effort to find out the level of project management in organisations in La Rioja.

In a context where projects predominate, the capacity of a territory to manage and develop them is a key asset for looking to the future with confidence.

1.3. La Rioja, Think-TIC and project management

A large number of milestones could be highlighted that have set the path towards leadership in the entire northern part of Spain in the promotion and training of companies over project management with internationally recognised methodologies such as PMP, Prince2, etc.

The first of the milestones dates back to November 2011, with the delivery of the first preparation course for the Project Management Professional (PMP)® certification of PMI in La Rioja.

As a result of this event, and in response to the interest aroused in the participants by the training received, it was decided to take a second step and allow students to become officially qualified in this methodology. In 2012, contacts were made with the Project Management Institute - PMI (USA), one of the most prestigious international institutions in the field of project management, to hold the certification exams at the centre's facilities.

The first certification exams were held in February 2012 and, given the success of this initiative, the work has continued in the following years and whenever there has been demand for the training-certification tandem. More than 1,110 professionals from La Rioja have been trained in different project management methodologies and tools (PMP, ACP, Scrum, Prince2, Jira, Project, etc.) in a total of 74 actions.

Another important milestone resulting from these first steps also took place in 2012, when a group of restless and enterprising students met in the centre's facilities to share their expectations, which later culminated in the creation of the Association of Project Management Professionals of La Rioja (APGP) in September 2012. This association is currently the most active in the north of Spain.

A significant event was the holding of the first Project Management Conference in October 2014, which brought together more than 60 people interested in the subject, and which is now a must-attend event for professionals in the region.



2012

Start of contacts with the Project Management Institute (USA).

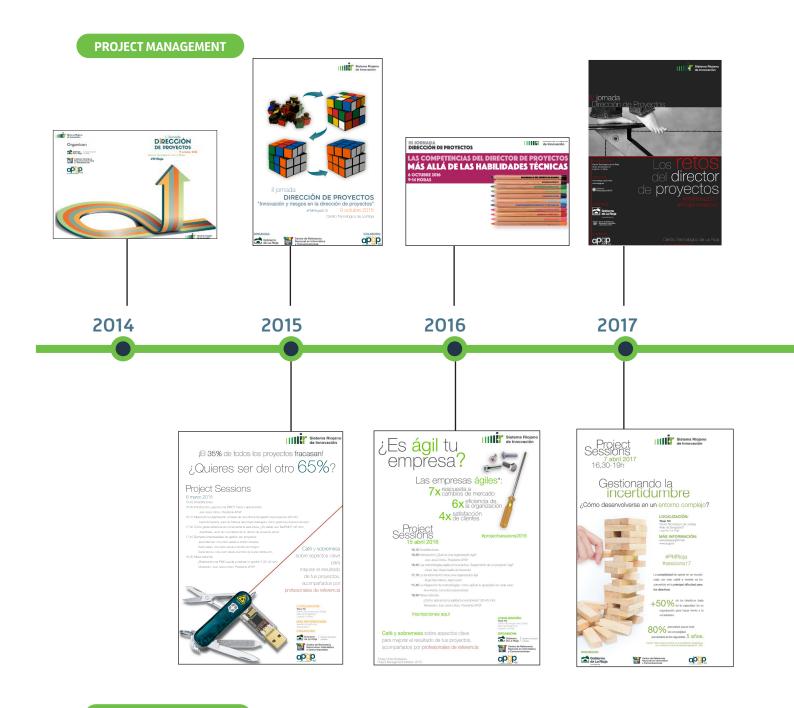
Former students create the Riojan association APGP.



2011

Teaching of the first Project Management Professional (PMP) course of PMI in La Rioja.

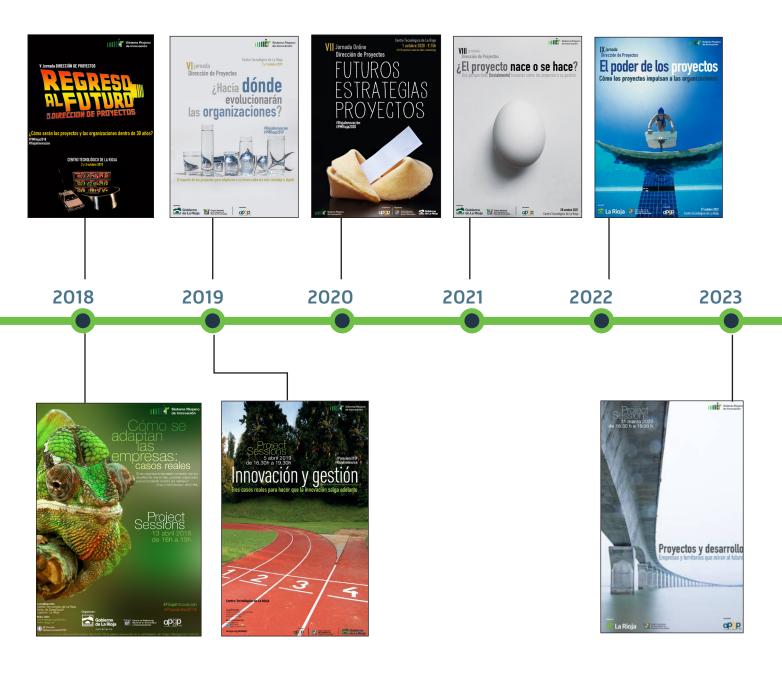




PROJECT SESSIONS

The last Project Management Event was held in October 2022, without restrictions and with the possibility to follow the event both in person and by video streaming.

At these meetings, national and international experts advance lines of action and report on their best practices different aspects of project management. To date, **9 editions** of the Project Management Conference have been held, in which more than **700 people** have participated. Subsequently, in the spring of 2015, given the acceptance of the last annual project management meetings and driven by the growing curiosity of the APGP professional association, a new event format was created, more informal and closer to the management of companies in La Rioja, the "Project Sessions". This type of seminar has made it possible to bring the latest trends, experiences and strategies in project management to the managers of large and small companies in La Rioja in a relaxed and informal way. A total of **6 Project Sessions** were held, interrupted by the pandemic, with an average attendance of 65 participants, i.e. more than 300 people in person.



This format was relaunched in March 2023 with a first part that can be followed in two formats, face-to-face and online. The usual number of participants has been restored:

The growing dynamism in the region has made it possible to detect a European interest in project management. This interest crystallised in the PM2 methodology, developed by the European Commission with the aim of being easy and simple to apply to any type of project.

It was presented in Brussels in February 2018. Then, in Spain, the presentation of the methodology will take place in the facilities of the Technology Centre of La Rioja.

The latest milestones are the studies promoted by the Government of La Rioja, from the DGRII, for the knowledge of the development of project management in La Rioja organisations. The first was published in 2020 and the second corresponds to this report, published in March 2023, where we can see the evolution of recent years.



1.4. Project management and innovation

In this edition, special attention has again been given to the project-innovation binomial. Innovation has always been closely linked to project management. The competitiveness, digitalisation and sustainability of organisations depend on the integration of R&D&I activities in their daily work and, more fundamentally, in their own strategy.

In recent years, the DGRII has observed a significant increase in innovative activity in the business sector in La Rioja. To a large extent, this increase has been encouraged by the constant investment made by both regional and national administrations in supporting these activities.

With this report, we have also sought to find out qualitatively how companies that carry out R&D&I projects correspond to those that do not develop actions systematically or following specific project management methodologies, to what extent this is the case and how they are affected. The lack of objective criteria, systematics and contrasted methods means that initiatives susceptible to becoming R&D&I projects can be lost or end up fulfilling the initially established objectives. Poor management of R&D&I projects can turn projects into time and resource guzzlers far beyond what was initially planned.

Innovation management (the process from the generation of an innovative idea to its implementation and valorisation) requires specific methodologies and systematics. Innovation management (the process from the generation of an innovative idea to its implementation and valorisation) requires specific methodologies and systematics.

The success of an R&D&I project does not depend solely on the technical skills of the human team. In many cases, the success of the R&D&I project depends on the management skills and experience in project management in general. Therefore, the maturity of the company in project management and its potential to carry out R&D&I successfully is closely linked to its knowledge of project management.





2. Content of the project management maturity report

2.1. Context and definitions

A **project** is understood as a temporary organisational structure set up to create a unique product or service within certain constraints such as time, cost and quality.

Organisations launch projects to achieve their objectives (transformation, sales, innovation... of all kinds). In contrast to routine tasks (operations), which are repetitive and necessary to maintain the organisation's activity, projects are the tool for organisations **to evolve**.

In simple terms, the installation of a production line for a new car model would be a project, and the use of the line, i.e. the production of cars, would be the company's operations. Projects have a function: to serve the organisation, to achieve its objectives, to have the desired impact on the organisation. A project will be successful to the extent that it achieves what it was developed for, which is the purpose of the project. A project can be developed in an excellent way, fulfilling all the defined requirements, and nevertheless not have the expected impact on the organisation.

> Going back to the previous example, why is the company installing a line to produce a new model? Theoretically, this model is expected to be accepted by the market and the new line will supply this demand. If sales are minimal, is the project a success?



Once the projects to be launched have been defined, project management is used to ensure that they are developed appropriately and meet the defined requirements. In this way, **project** management is the set of activities of planning, organising, controlling, ensuring and managing the resources and work required to achieve specific goals and objectives of the project.

Projects serve the organisation. The success of the project depends on its impact on the organisation.

Project management serves projects. The success of project management will depend on the degree to which specific project goals and objectives are achieved.

It is therefore important to decouple the success of the project from the success of the project management.

A well managed project, i.e. one that meets all the requirements for which it was created, may end up having no impact on the organisation and therefore not be a success. A poorly managed project (with deviations from the budget, deadlines or not fulfilling everything that was defined) can have a major impact on the organisation.

2.2.Characteristics of the methodology

All this information can be consulted in more detail in the annex "Survey framework and sample design" of the full report.

The **basic unit** of the survey, i.e. the unit of observation that can be investigated to find out the level of development of project management in organisations in La Rioja, is the company. The observation unit has been defined in such a way that we can obtain more information than just the place where the projects are carried out. The survey was answered between August and October 2021.

The **target population** of the study consists of three distinct areas: the public sector, the private sector and non-profit institutions (NPISHs).

A random sample, stratified by size of establishment and **activity**, combined with a census for the larger units, has been selected. The target population of the survey is all companies with more than 2 employees, since it is considered that companies need to have a minimum size in order to participate in project management tools, and from these companies with employees and activity in La Rioja belonging to sections A, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R and S of the CNAE-O9 were selected.

The total population for this study was 5,340 establishments, of which 1,049 were surveyed. 379 responses were collected, representing 36.13% of the sample.

2.3. General features of the survey

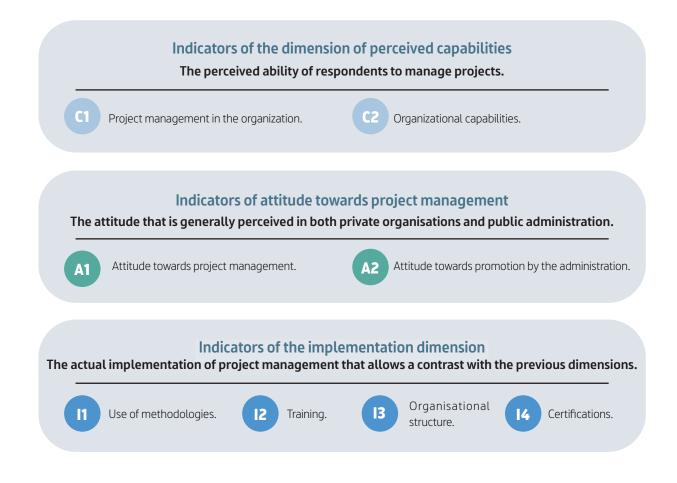
In this edition, the questionnaire launched in 2019 has been used as a starting point, with the addition of questions related to project results. The questionnaire thus contains a total of 17 questions, of which 14 are related to project management, two are explicitly linked to the management of R&D&I projects and a previous question on the classification of the establishments that have answered.

This set of questions, listed in the methodological annex, has been approached in the same way as in 2019, with the idea of monitoring the same indicators, facilitating comparisons between the results collected and constituting a reference for the interpretation of future surveys.

2.4. Analysis methodology

The methodology has eight indicators grouped into three dimensions: perceived capabilities, attitudes and implementation.





The relationship between the indicators and the questions in the Each of these indicators has a minimum value of 1 and a maximum questionnaire is shown below.

value of 5, depending on the answer given in the questionnaire.

C1

Perception of management

The perception of project management in the organisation, with the acronym C1, corresponds to the question "How would you describe project management in your organisation?".

C2

Perception of the Capacities

Perception of the Organisation's Capabilities in Project Management, indicator with the acronym C2, corresponds to the question asking for the assessment of the statement "My organisation has appropriate capabilities to manage projects effectively".

A1

Perception of the positive impact

Perception of the positive impact of project management has on organizations, Attitude towards project management, with the acronym A1, corresponds to the question with responses based on a satisfaction scale "I believe that project management improves the performance of my organization".

A2

Perception about the promotion of project management

Perception of the role that public administrations (from now on Public Administrations) should play in promoting the use of project management methodologies, Attitude towards promotion by the Public Admi**nistration**, indicator with the acronym **A2**, corresponds to the question stated as "I believe that public administrations should encourage the application of project management methodologies".

Use of methods and techniques

Use of specific methods and techniques, Use of project management methodologies, an indicator with the acronym **I1**, corresponds to the question that assesses the degree that "you use some methodology" regularly to manage projects in your organization".

13

Organisational structure

There is a formal structure for project management. Organizational structure, with the acronym I3, corresponds to the question "Does your organization have a specific structure for project management?

12

Training

Training in project management, with the acronym 12, where the level and intensity of training is assessed according to the question "the people who manage projects in your organisation receive/can access specific training in project management".

4

Certified people

Finally, the indicator of Certified People, also 14, is derived from the questionnaire question "Is there anyone in your organisation certified in any of the project management methodologies".

2.5. Index for measuring project management development

The Global Development Index (GDI) is calculated using the values of the indicators grouped according to the three dimensions of observation mentioned above (perceived capabilities, attitudes and implementation). The value of each of these dimensions is the arithmetic mean of the values of the indicators it contains.

Using these dimensions, the Global Development Index (GDI) of project management is calculated according to the following formula, where ω_1, ω_2 and ω_3 are the weights assigned to each dimension. In other words, the relative importance of each dimension is weighted to balance the influence of the more subjective dimensions, which are based on perceptions (perceived capabilities and attitudes), against the dimension that measures the implementation of project management, which is based on more objective and quantifiable data.

(See formula below)

Therefore, the Perceived Capacity indicator is given the lowest weight (ω 1=1/7) as it is more closely linked to the respondent's overall perception. This indicator shows the perception of the general capacity of one's own organisation, although this may not be fully in line with reality.

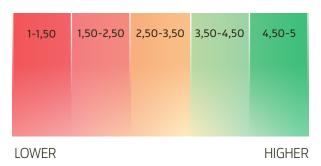
As for weight \mathbf{W} 2, which corresponds to the attitude towards project management, understood as the attitude that allows to modulate the efforts towards project management, it is considered more important with a value of (\mathbf{W} 2=2/7), as it is an incentive towards greater maturity in terms of project management.

Finally, the implementation dimension, with indicators supported by tangible data resulting from the organisation's actual practices, is given the highest value (3=4/7).

This leaves a balanced formulation where the sum of the three weights corresponds to the unit, $\omega_1 + \omega_2 + \omega_3 = 1$. The values obtained for the development index range from 1 for the lowest value to 5 for the highest value, following the same criteria as established for all the indicators in the study.

This establishes a simple method for creating a synthetic indicator that numerically characterizes the level of development of the organizations obtained from the three dimensions that have been worked on (capability, attitude and implementation in the face of project management).

In the following figure we can see the colour gradient that will serve as a legend to visualise more intuitively the values represented in the summary tables of the indicators and the Global Development Index (GDI).



2.6. Fields of analysis for the study indicators

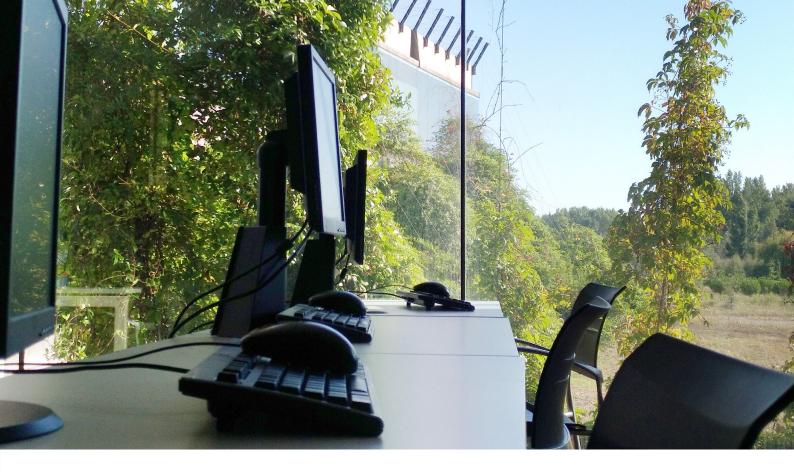
At the time of the study of each of the indicators, the influence of different aspects that may have an impact on the final result has been studied in greater depth, allowing more criteria to be used in drawing conclusions and making more concrete and effective recommendations.

The results have been analysed from the following perspectives:

- 1. The number of employees.
- 2. The sector of activity.
- 3. The type of organisation.
- 4. The role of the person answering the questionnaire.

Global Development Index (GDI)= $(\omega_1 * Capacity + \omega_2 * Attitude + \omega_3 * Implementation)$





3. Results of the study

This section presents the main results obtained and, where appropriate, compares them with the information collected in the previous edition.

For the first time, this edition includes questions to assess the level of compliance of the projects with the objectives, deadlines and budgets set. These questions have been defined to allow comparison with national and international benchmark studies. It also provides the opportunity to relate the achievement of results to the level of project management maturity of organisations.

The levels of achievement are expressed as percentages. As mentioned above, the indicators corresponding to the level of development present values within a narrow range between a minimum of 1 and a maximum of 5. In general, they are presented together, with a colour code that helps to visualise the differences in value and facilitates the drawing of conclusions.

3.1. Global results

3.1.1. Global results of project compliance

As a novelty compared to the previous edition, this time the results include answers to questions related to the projects' compliance with initial expectations.

In this way, three aspects of compliance are evaluated:

- The objectives initially set
- The planned deadlines
- The planned budget

The data obtained as percentages of responses for each 3.1.2. Global results of the indicators option are shown in the table below.

	Goals	Deadlines	Budget
Completely disagree	2,0%	2,0%	2,0%
Disagree	0,7%	1,6%	2,3%
Neither agree nor disagree	17,9%	17,4%	18,0%
Agree	53,6%	57,4%	54,9%
Completely agree	25,8%	21,6%	22,9%

As can be seen, around 80% of organisations 'often' or 'always' comply with the parameters defined for their projects. Similarly, the number of organisations whose projects 'never' or 'hardly ever' comply represents about 4% of the total.

To obtain a numerical result, these responses can be converted into calculated rates (applying values of O, 25%, 50%, 75% and 100% to the above categories).

	Goals	Deadlines	Budget
Tasa cumplimiento	75,2%	73,8%	73,6%

The comparability of the values is strongly conditioned by the type of projects (volume, complexity, etc.) and organisations, as well as by the methodology used.

In general, however, the values obtained are in line with the majority of studies, slightly more favourable in terms of time and budget, probably due to the greater presence of SMEs, whose projects tend to be less complex than those of large companies and institutions.

As a guide, the **Pulse of the Profession 2021**, published by the Project Management Institute, shows the results for project compliance **world** wide and in **Europe** in terms of objectives (73% and 70% respectively), deadlines (55% and 50%) and budget (61% and 57%).

With regard to the characterisation of project management in La Rioja organisations, the data obtained in this second edition show a similar **distribution to** those collected in the first edition. with a slight but generalised improvement in most of the indicators. Thus, the Attitude dimension receives the best score, followed by Perceived Capability. At a considerable distance behind is the implementation dimension.

In other words, there is still a situation in which organisations have a positive attitude towards project management and consider themselves to be reasonably capable of taking them forwards, but find it difficult to translate this into their actual operations.

Taking into account how far the values of the Implementation values are from those of the Capabilities, the question arises as to the level of objectivity of the perceptions (are the organisations too optimistic in perceiving themselves as capable?).

All this can be seen in the figures and tables below.

Evolution of the indicators

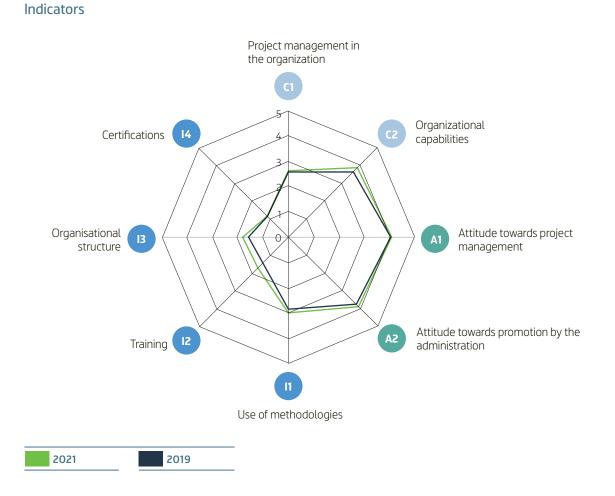
As can be seen, almost **all the indicators show a positive trend**, with the exception of that relating to certification, which shows a slightly negative trend. It is worth noting that the largest increases are recorded in the indicators relating to Implementation (I3, +0.21 and 11, +0.19), an area where there is the greatest potential for improvement.

Evolution of the indicators

	2021	2019	Evolution
C1. Project management in the organization	2,61	2,56	+0,05
C2. Organizational capabilities	3,87	3,71	+0,16
A1. Attitude towards project management	4,08	4,05	+0,03
A2. Attitude towards promotion by the administration	3,96	3,83	+0,13
I1. Use of methodologies	3,07	2,88	+0,19
I2. Training	1,73	1,68	+0,05
I3. Organisational structure	1,80	1,59	+0,21
14. Certifications	1,14	1,16	-0,02

lower

higher

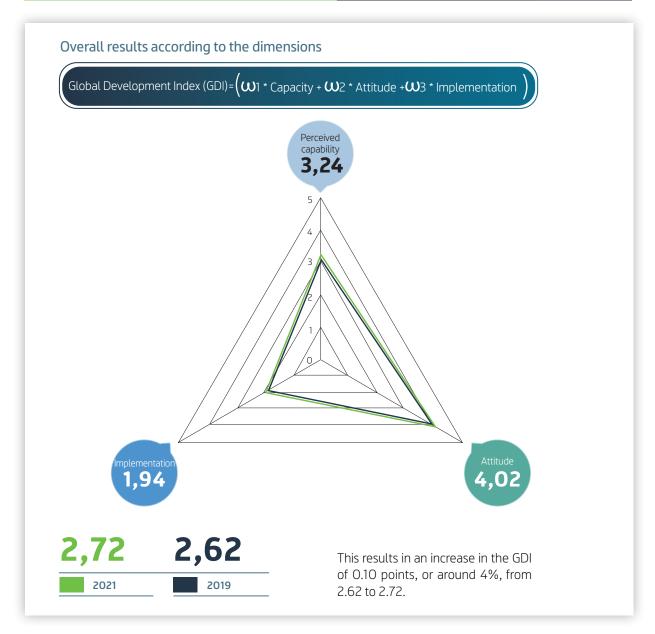


Evolution of dimensions and GDI

Performance across the dimensions has been fairly consistent, with overall increases of between 0.08 and 0.12 points, which shows a **positive trend**, especially considering the unprecedented situation caused by the pandemic that organisations have faced in the two years between surveys.

Proportionally, the **better development of the Implementation dimension**, where organisations have more scope for improvement, is of relevance.

Dimension	2021	2019	Evolution
Perceived capability	3,24	3,14	+0,10
Attitude	4,02	3,94	+0,08
Implementation	1,94	1,82	+0,12
GDI	2,72	2,62	



3.2. Results by number of employees

3.2.1. Results of projects compliance

It can be seen that most of the answers are concentrated on "often" for all sizes and parameters evaluated.

Nevertheless, the results generally show a **positive re-lationship between the number of employees and**

the fulfilment of project expectations. This can be seen in the result of the calculated rate, which is very close for the two groups of smaller organisations and slightly higher for organisations with 50 and more employees.

Goals	Total	1-9	10-49	50 and more
Completely disagree	2,0%	4,2%	0,9%	0,0%
Disagree	0,7%	0,0%	1,8%	0,0%
Neither agree nor disagree	17,9%	16,9%	22,9%	12,0%
Agree	53,6%	55,9%	48,6%	57,3%
Completely agree	25,8%	22,9%	25,7%	30,7%
Compliance rate	75,2%	73,3%	74,1%	79,7%

Deadlines	Total	1-9	10-49	50 and more
Completely disagree	2,0%	4,2%	0,9%	0,0%
Disagree	1,6%	0,0%	2,7%	2,7%
Neither agree nor disagree	17,4%	20,8%	16,4%	13,3%
Agree	57,4%	49,2%	63,6%	61,3%
Completely agree	21,6%	25,8%	16,4%	22,7%
Compliance rate	73,8%	73,1%	73,0%	76,0%

Budget	Total	1-9	10-49	50 and more
Completely disagree	2,0%	4,1%	0,9%	0,0%
Disagree	2,3%	2,5%	2,8%	1,3%
Neither agree nor disagree	18,0%	17,4%	18,3%	18,4%
Agree	54,9%	48,8%	61,5%	55,3%
Completely agree	22,9%	27,3%	16,5%	25,0%
Compliance rate	73,6%	73,1%	72,5%	76,0%



Figure. Compliance rate by number of employees.

3.2.2. Indicators results

	Total	1-9	10-49	50 and more
C1. Project management in the organization	2,61	2,34	2,43	3,22
C2. Organizational capabilities	3,87	3,72	3,83	4,18
A1. Attitude hacia la gestión de proyectos	4,08	3,98	3,98	4,39
A2. Attitude towards promotion by the administration	3,96	3,84	3,88	4,28
I1. Use of methodologies	3,07	2,93	2,87	3,58
I2. Training	1,73	1,47	1,65	2,37
13. Organisational structure	1,80	1,49	1,70	2,61
I4. Certifications	1,14	1,09	1,12	1,32

The results show that for the **project management development indicators,** there is a much **stronger positive relationship between size and maturity**. Organisations with 1 to 9 and 10 to 49 employees show fairly even values, while larger organisations show differences.

Among the aspects that have improved the most are the growth in the use of methodologies in companies

with 1 to 9 and 10 to 49 employees (+0.35 and +0.23 respectively), training in companies with 10 to 49 employees (+0.26) and the organisational structure of larger companies (+0.47).

The implementation indicators presented below show the reality of the adoption of project management practices and provide a more accurate picture of how organisations actually operate.



Figure. Implementation indicators by size.

Looking at the dimensions, the trend described above is consolidated. **The smallest organisations** (1 to 9 and 10 to 49 employees) show a significant similarity of results, **while the largest** organisations **show significantly higher levels** (between 0.40 and 0.60 points).

	Το	tal	1-	9	10-	49	50 and more	
	2021	2019	2021	2019	2021	2019	2021	2019
Perceived capability	3,24	3,14	3,03	2,84	3,13	3,03	3,70	3,55
Attitude	4,02	3,94	3,91	3,80	3,93	3,86	4,33	4,18
Implementación	1,94	1,82	1,74	1,61	1,84	1,66	2,47	2,31
GDI	2,72	2,62	2,55	2,41	2,62	2,49	3,18	3,02

GDI according to employees

As can be seen, the evolution **shows a positive trend for all sizes of organisation.**

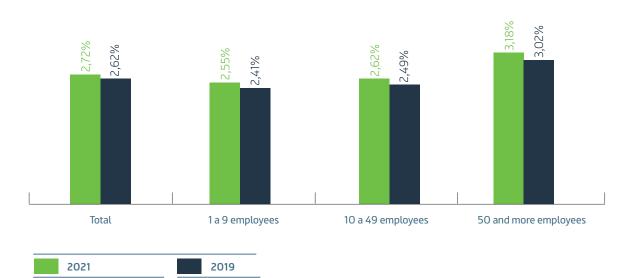


Figure. GDI indicator by number of employees.

3.3. Results by sector of activity

3.3.1. Project compliance resulys

In the case of sectors, it is important to note that the sample is defined in a representative way for each sector of activity in the economy of La Rioja, so there is a significant variability in the number of organisations available in each case.

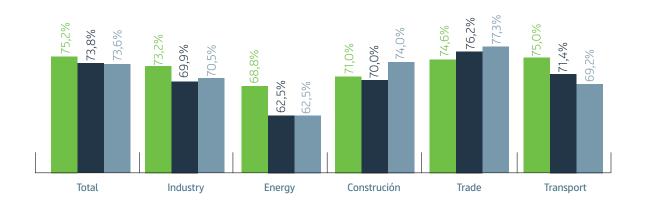
According to the results, the **sectoral component** has a relevant **influence on organisational practices, including project management**. It is not surprising, therefore, that there is a clear variability that is reflected in the dispersion of project compliance data.

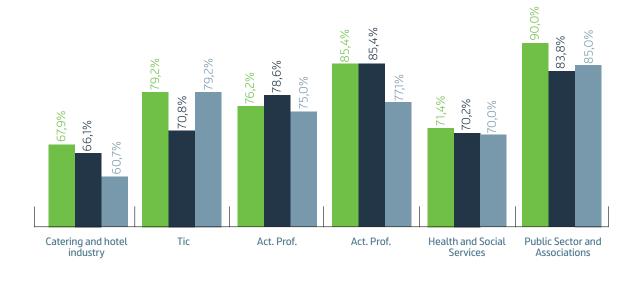
Goals	Total	Industry	Energy	Construction sector	Trade	Transport	Catering and hotel industry	F	Act. Prof.	Act. Prof.	Health and Social Services	Public Sector and Associations
Completely disagree	2,0%	0,0%	25,0%	4,0%	1,6%	7,7%	7,1%	0,0%	2,4%	0,0%	0,0%	0,0%
Disagree	0,7%	1,2%	0,0%	0,0%	1,6%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Neither agree nor disagree	17,9%	24,4%	0,0%	28,0%	16,1%	7,7%	21,4%	16,7%	14,3%	0,0%	28,6%	0,0%
Agree	53,6%	54,9%	25,0%	44,0%	58,1%	53,8%	57,1%	50,0%	57,1%	58,3%	57,1%	40,0%
Completely agree	25,8%	19,5%	50,0%	24,0%	22,6%	30,8%	14,3%	33,3%	26,2%	41,7%	14,3%	60,0%
Compliance rate	75,2%	73,2%	68,8%	71,0%	74,6%	75,0%	67,9%	79,2%	76,2%	85,4%	71,4%	90,0%
Deadlines	Total	Industry	Energy	Construction sector	Trade	Transport	Catering and hotel industry	E	Act. Prof.	Act. Prof.	Health and Social Services	Public Sector and Associations
Completely disagree	2,0%	0,0%	25,0%	4,0%	1,6%	7,1%	7,1%	0,0%	2,4%	0,0%	0,0%	0,0%
Disagree	1,6%	3,6%	0,0%	4,0%	0,0%	0,0%	0,0%	0,0%	2,4%	0,0%	0,0%	0,0%
Neither agree nor disagree	17,4%	26,5%	0,0%	20,0%	14,3%	7,1%	35,7%	33,3%	7,1%	0,0%	23,8%	5,0%
Agree	57,4%	56,6%	50,0%	52,0%	60,3%	71,4%	35,7%	50,0%	54,8%	58,3%	71,4%	55,0%
Completely agree	21,6%	13,3%	25,0%	20,0%	23,8%	14,3%	21,4%	16,7%	33,3%	41,7%	4,8%	40,0%
Compliance rate	73,8%	6 9,9%	62,5%	70,0%	76,2%	71,4%	66,1%	70,8%	78,6%	85,4%	70,2%	83,8%
Budget	Total	Industry	Energy	Construction sector	Trade	Transport	Catering and hotel industry	F	Act. Prof.	Act. Prof.	Health and Social Services	Public Sector and Associations
Completely disagree	2,0%	0,0%	25,0%	4,0%	1,6%	7,7%	7,1%	0,0%	2,3%	0,0%	0,0%	0,0%
Disagree	2,3%	4,8%	0,0%	0,0%	0,0%	0,0%	7,1%	0,0%	4,5%	0,0%	0,0%	0,0%
Neither agree nor disagree	18,0%	24,1%	0,0%	16,0%	17,2%	15,4%	35,7%	16,7%	9,1%	0,0%	30,0%	10,0%
Agree	54,9%	55,4%	50,0%	56,0%	50,0%	61,5%	35,7%	50,0%	59,1%	91,7%	60,0%	40,0%
Completely agree	22,9%	15,7%	25,0%	24,0%	31,3%	15,4%	14,3%	33,3%	25,0%	8,3%	10,0%	50,0%
Compliance rate	73,6%	70,5%	62,5%	74,0%	77,3%	69,2%	60,7%	79,2%	75,0%	77,1%	70,0%	85,0%

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The highest levels of compliance with objectives, deadlines and budget are concentrated in the **Public and Partnerships and Education sectors**. In both cases, these are sectors with a high impact of **regulated procedures**, which are more explicit in terms of project expectations and establish the rules of the game more clearly. In the opposite case, with the **lowest levels**, are the **Energy and Hospitality sectors**.

As can be seen, compliance rates show a variable pattern, both in absolute values and in the preponderance of one aspect over the other two, with a certain advantage for compliance with objectives.





Goals	Deadlines	Budget

Figure. Compliance rate by sector.

3.3.2. Indicators results

The analysis by sector of activity shows **great variability in relation to the level of project management**. This may be logical, given that the characteristics of a sector (common projects, level of complexity, etc.) as well as the diversity of actors in it, determine a greater or lesser need for project management. Thus, the Education and IT **sectors show the highest levels of the indicators**, contrasting with the Catering and Hotels **sector which shows the lowest**.

	TOTAL	Industry	Energy	Construction	Trade	Transport	Catering and hotel industry	E	Professional Activities	Education	Health and Social Services	Public Sector & Assoc.
C1. Project management in the organization	2,61	2,54	2,33	2,22	2,54	2,92	1,67	3,17	2,77	3,08	3,06	2,60
C2. Organizational capabilities	3,87	3,88	4,00	3,64	3,82	3,73	3,54	4,67	4,09	3,50	3,81	4,15
A1. Attitude towards project management	4,08	4,19	4,33	3,93	4,09	3,87	3,54	4,29	3,94	4,08	4,29	4,24
A2. Actitud hacia el fomento por parte de la administración	3,96	3,94	4,33	4,08	3,79	3,93	3,73	4,17	3,96	4,17	3,95	4,29
I1. Use of methodologies	3,07	3,01	3,00	2,80	2,92	3,08	2,25	3,00	3,29	3,58	3,30	3,67
I2. Training	1,73	1,84	1,40	1,79	1,59	1,38	1,38	2,17	1,64	2,50	1,71	1,95
13. Organisational structure	1,80	1,85	1,20	1,52	1,64	1,47	1,16	2,43	2,00	2,82	1,96	2,17
14. Certifications	1,14	1,46	1,00	1,10	1,09	1,14	1,17	1,43	1,20	1,50	1,14	1,12



Figure. Implementation indicators by sector.

The dimensions, however, show a **similar pattern regardless of the absolute value**. In general, organisations score highest on the Attitude dimension, around 4 out of 5. This is followed by Perceived capability, just above 3. Finally, Implementation, around 2.

Compared to the previous report, the evolution of the sectors has been uneven, with an improve-

ment in the global index that includes both significant increases (+0.40 in Industry and +0.37 in Public Sector and Associations) and significant decreases (-0.28 in IT and -0.26 in Health and Social Services). Given the heterogeneity of the sectors and the different levels of representativeness depending on the size of the sector, these values should be taken with caution.

		IUIAL		Industry		cnergy		Construction	Turuda A	Irade		Iransport	Catering and hotel	industry	Ŀ	=	Professional	Activities		Education	Health and Social	Services	Diblic Cortors 0 Acros	LUDIL JELIOI & ASSOL.
	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019
Perceived capability	3,24	3,14	3,21	3,13	3,17	3,00	2,93	3,11	3,18	3,13	3,33	3,47	2,60	2,66	3,92	3,88	3,43	3,01	3,29	3,01	3,43	3,82	3,38	3,03
Attitude	4,02	3,94	4,06	3,94	4,33	4,38	4,00	3,84	3,94	3,85	3,90	3,64	3,64	3,34	4,23	4,50	3,95	4,01	4,13	4,00	4,12	4,28	4,26	4,17
Implementación	1,94	1,82	2,04	1,88	1,65	1,75	1,80	1,71	1,81	1,57	1,77	1,83	1,49	1,65	2,26	2,62	2,03	1,84	2,60	2,03	2,03	2,31	2,23	1,71
GDI	2,72	2,62	2,78	2,65	2,63	2,68	2,59	2,52	2,61	2,44	2,60	2,58	2,26	2,28	3,06	3,34	2,78	2,63	3,13	2,73	2,83	3,09	2,97	2,60

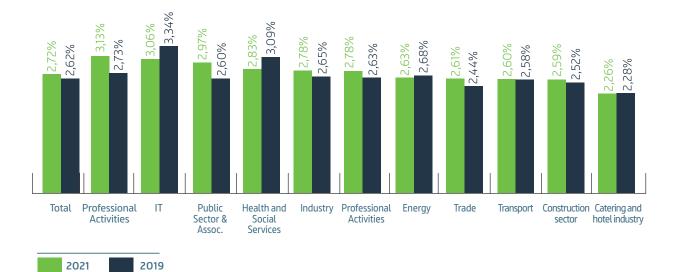


Figure. GDI indicator by sector.

3.4. Results by type of organisation

3.4.1. Project compliance results

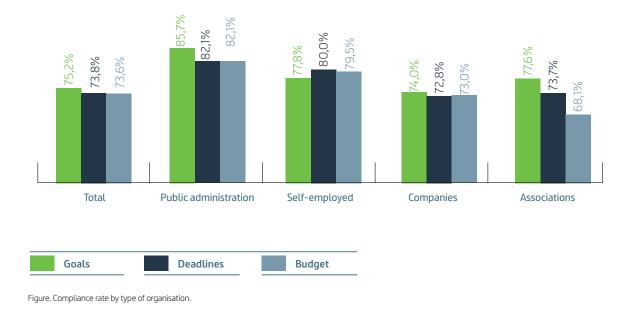
The typology of organisation includes the Public Administration, non-profit entities and the private for-profit sector, differentiating whether it is carried out as a natural person or as another type of legal entity.

The results show that the **level of compliance in the public sector significantly exceeds** the values obtained in the other types of organisations. The position of the Self-Employed, in second place, is remarkable. The lowest values are found in companies, except in budget compliance. Probably, the heterogeneity inherent in the consideration of companies, both in terms of size and sectors, may have some connection with these results.

Goals	Total	Public administration	Self-employed	Companies	Associations
Completely disagree	2,0%	2,0%	5,3%	2,0%	5,3%
Disagree	0,7%	0,8%	0,0%	0,8%	0,0%
Neither agree nor disagree	17,9%	19,4%	10,5%	19,4%	10,5%
Agree	53,6%	54,9%	47,4%	54,9%	47,4%
Completely agree	25,8%	22,9%	36,8%	22,9%	36,8%
Compliance rate	75,2%	85,7%	77,8%	74,0%	77,6%

Deadlines	Total	Public administration	Self-employed	Companies	Associations
Completely disagree	2,0%	0,0%	0,0%	2,0%	5,3%
Disagree	1,6%	0,0%	0,0%	2,0%	0,0%
Neither agree nor disagree	17,4%	9,5%	20,0%	18,4%	10,5%
Agree	57,64%	52,4%	40,0%	58,0%	63,2%
Completely agree	21,6%	38,1%	40,0%	19,6%	21,1%
Compliance rate	73,8%	82,1%	80,0%	72,8%	73,7%

Budget	Total	Public administration	Self-employed	Companies	Associations
Completely disagree	2,0%	0,0%	0,0%	2,0%	5,6%
Disagree	2,3%	0,0%	0,0%	2,3%	5,6%
Neither agree nor disagree	18,0%	14,3%	18,2%	18,8%	11,1%
Agree	54,9%	42,9%	45,5%	55,5%	66,7%
Completely agree	22,9%	42,9%	36,4%	21,5%	11,1%
Compliance rate	73,6%	82,1%	79,5%	73,0%	68,1%



3.4.2. Indicators results

The level of uniformity in terms of project management maturity is more evident here than in the case of the sectors. In terms of indicators, there has been **significant progress in the public sector**, especially in terms of implementation, which helps it to position itself as the **leader in this comparison**. At the other extreme is the group of the **Self-Employed**, with the lowest levels of maturity. The **evolution of the scores has been irregular**. Thus, while Public Administration and Companies have improved in all dimensions, the Self-Employed have slightly worsened in Attitude and the Associations have done so in both Attitude and Perceived Ability. The good news is the **generalised increase in the Implementation dimension**, with very significant growth.

	Total	Public administration	Self- employed	Companies	Associations
C1. Project management in the organization	2,61	2,62	2,36	2,64	2,28
C2. Organizational capabilities	3,87	4,00	3,67	3,88	3,83
A1. Attitude towards project management	4,08	4,32	3,67	4,08	4,11
A2. Attitude towards promotion by the administration	3,96	4,27	3,45	3,95	4,06
I1. Use of methodologies	3,07	3,50	3,09	2,98	3,67
I2. Training	1,73	2,10	1,50	1,74	1,45
13. Organisational structure	1,80	2,29	1,67	1,77	1,86

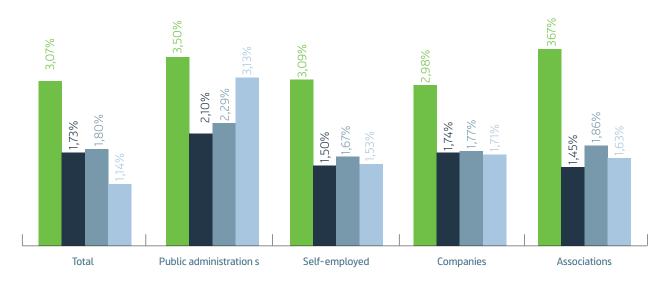




Figure. Implementation indicators, by typology.

	Total			blic stration	Self- on employed		Comp	anies	Associations	
	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019
Perceived capability	3,24	3,14	3,31	3,13	3,09	2,97	3,26	3,15	3,06	3,17
Attitude	4,02	3,94	4,30	4,28	3,56	3,60	4,01	3,92	4,08	4,27
Implementación	1,94	1,82	2,75	1,76	1,95	1,58	2,05	1,85	2,15	1,94
GDI	2,72	2,62	3,27	2,67	2,56	2,36	2,78	2,63	2,83	2,78

GDI by typology

All this points to the **clear dominance of public administration** in terms of the Global Development Index (GDI), followed by Associations, Companies and finally the Self-employed.

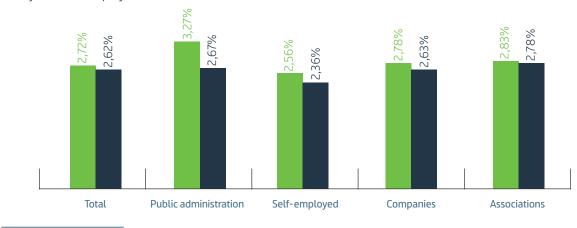




Figure. IGD indicator by type of organisation.

3.5. Results by innovative activities

3.5.1. Project compliance results

The implementation of innovation activities usually takes the form of projects. It is not surprising, therefore, that innovative organisations have a slight advantage over organisations that do not carry out R&D&I, especially in terms of objectives.

Goals	Total	No I+D+i	Yes I+D+i
Completely disagree	2,0%	2,6%	0,0%
Disagree	0,7%	0,5%	1,1%
Neither agree nor disagree	17,9%	20,8%	9,7%
Agree	53,6%	50,0%	63,4%
Completely agree	25,8%	26,0%	25,8%
Compliance rate	75,2%	74,1%	78,5%

Deadlines	Total	No I+D+i	Yes I+D+i
Completely disagree	2,0%	2,6%	0,0%
Disagree	1,6%	1,0%	1,1%
Neither agree nor disagree	17,4%	16,3%	19,6%
Agree	57,4%	57,1%	59,8%
Completely agree	21,6%	23,0%	19,6%
Compliance rate	73,8%	74,5%	74,2%

Budget	Total	No I+D+i	Yes I+D+i
Completely disagree	2,0%	2,6%	0,0%
Disagree	2,3%	2,0%	0,0%
Neither agree nor disagree	18,0%	18,4%	18,3%
Agree	54,9%	54,1%	60,2%
Completely agree	22,9%	23,0%	21,5%
Compliance rate	73,6%	73,2%	75,8%



Figure. Compliance rate according to innovative activities.

3.5.2. Indicators results

The results for the indicators show that **the organisa-tions that develop innovations** clearly dominate the non-innovative ones in all sections. Of particular relevance is the clear superiority in the use of methodologies (I1) and organisational structure (I3).

Logically, innovative organisations dominate widely in all dimensions, with particular **clarity in the area of Imple-mentation**.

Moreover, they have improved in all areas. The good news with respect to non-innovative organisations is that their evolution has been most intense in the Implementation dimension.

As a result, innovative **organisations have a significantly higher global project management development index than** non-innovative organisations.

	Total	No I+D+i	Yes I+D+i
C1. Project management in the organization	2,61	2,42	2,96
C2. Organizational capabilities	3,87	3,71	4,21
A1. Attitude towards project management	4,08	3,94	4,41
A2. Attitude towards promotion by the administration	3,96	3,83	4,22
I1. Use of methodologies	3,07	2,83	3,59
I2. Training	1,73	1,57	2,18
13. Organisational structure	1,80	1,56	2,46
I4. Certifications	1,14	1,43	1,88

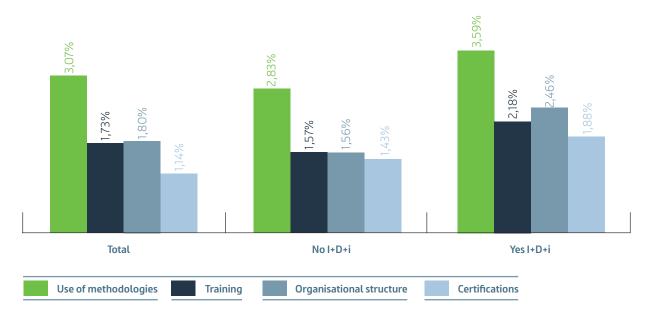


Figure. Implementation indicators, by innovative activities.

	Total		No I+D+i		Yes I+D+i	
	2021	2019	2021	2019	2021	2019
Perceived capability	3,24	3,14	3,07	2,92	3,58	3,54
Attitude	4,02	3,94	3,88	3,81	4,32	4,21
Implementación	1,94	1,82	1,85	1,57	2,53	2,47
GDI	2,72	2,62	2,60	2,40	3,19	3,12

GDI according to innovation





Figure. GDI indicator by innovative activities.

3.6. Analysis of results

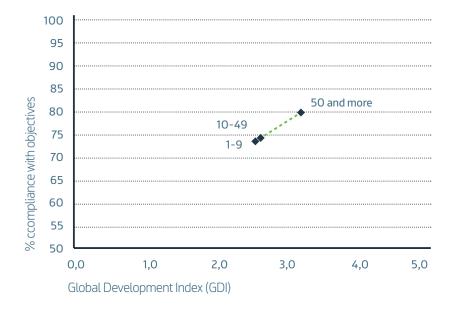
3.6.1. Results of project compliance and Global Development Index

What is new in this report is the availability of data on project compliance, which complements the maturity levels already available in the previous edition.

This allows the relationship between the two concepts to be explored, using as a reference the percentage of

project compliance and the global development index shown above.

The following figures show the relationship between the two concepts according to the results obtained for each of the analysis criteria used.



Number of employees

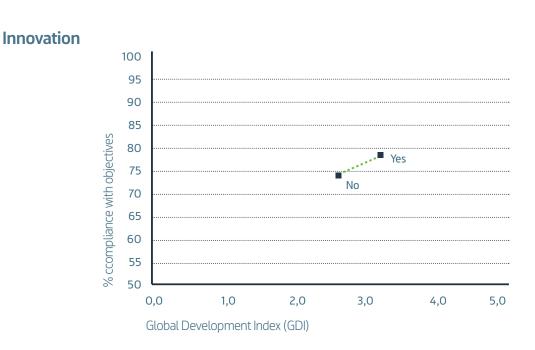






Typology





In all cases we have used the average value of the group for which the data point represents. The linear fit and linear correlation of the values are also noted for information.

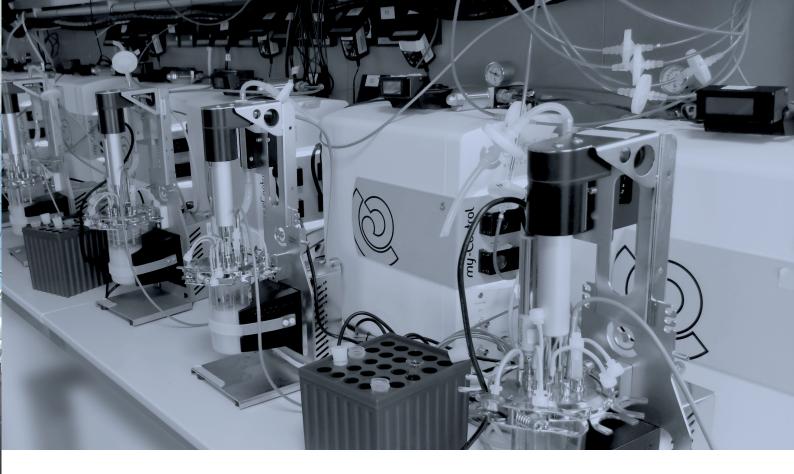
The results suggest that, for all the cases shown, the higher **the level of project management skills, the better the project performance**.

Likewise, if we look at the typology of the comparison criteria, there are two of them, sector of activity and

typology, which are stable (normally, an organisation does not change sector or typology).

The other two, size and innovation, are parameters that can change for the same organisation. Thus, an increase in size (number of employees) and the implementation of innovative activities correspond to an improvement in the organisation's performance in terms of both its management capacities and the achievement of project objectives.





4. CONCLUSIONS

The study led to a number of conclusions and recommendations, which are detailed below.

1. Project management is progressing, slowly but surely

The results show that **73% of organisations apply some level of project management**, an improvement on the previous edition (68%). This should not be misinterpreted as it still means that one in four organisations do not recognise the use of project management.

At a practical level, the degree of sophistication is low, with **55% of results falling within the basic levels of management** (ad hoc and individual project level practices). However, there is a slight positive evolution at the management level, which is slightly improved compared to the 2019 edition (58% at the basic levels). In view of the relationship shown between project management and project delivery, coupled with the clear trend towards projectification, it seems reasonable to anticipate a growing interest on the part of all types of organisations, which will boost project management preparation.

From the point of view of recommendations, several relevant points can be identified.

On the one hand, the **impact of projectification in all organisations and sectors** should be communicated in a didactic way, breaking down some stereotypes such as the association of projects with technical profiles, only with certain sectors or "my organisation is too small for that".

The **identification and dissemination of success stories** in similar organisations, close in terms of needs and capacities, is undoubtedly a tool that would lend credibility to the previous point.

Lastly, information and access to the huge number of sources and resources, often free of charge, that exist to help organisations develop.

2. Perception far outweighs actual implementation

The results of the previous edition are confirmed: organisations have very positive attitudes towards project management (4.02 out of 5), consider themselves quite capable (3.24 out of 5), but fall short in Implementation (1.94 out of 5).

However, it is the actual implementation aspects of project management that will affect the final result.

The good news is that this dimension showed the best development (+0.12), ahead of Perceived Capabilities (+0.10) and Attitude (+0.08). However, there is still a long way to go.

At this point, the identification of good practices is presented as the main tool to contribute to the real improvement of organisations. To this end, the need for vigilance is stressed.

Once identified, their practical transfer through specific training actions could result in a highly efficient strategy for the implementation of easily accessible improvements (known as quick wins).

In any case, and as a complement in the medium term, it is essential to maintain an adequate level of improvement and evolution of project management skills in organisations. This point reinforces the commitment of this DG to project management and its inclusion as a fundamental area of work through Think-TIC. The results can be seen in future editions of this report.

3. The size of the organisation determines its project management

La Rioja, like Spain, is made up mainly of small organisations, which play a key role in the productive and business structure.

The results obtained show a **notable difference in the capacity to manage projects** between smaller companies (1 to 9 and 10 to 49 employees) and larger ones (50 and more employees). This difference **reaches its maximum in the Implementation dimension**.

As described above, the projectification does not understand sizes or sectors, and organisations will have to compete in an economy where the weight of projects will become increasingly relevant.

It is true that size may determine the complexity of the challenges to be faced and therefore the capacities required. Also the availability of resources, which is usually linked to size. Perhaps these are the reasons why the greater the size, the more the level of capabilities.

It is also true that, according to the results, there are significant inequalities in aspects not directly related to resources. For example, in project management training. Think-TIC offers free, hands-on training. In addition, there are other online resources of a more general nature that extend and complement the Think-TIC offer.

In this context, in larger organisations (50 or more employees), half of the employees have some form of project management training, compared to 3 out of 10 in organisations with less than 10 employees. If attention is paid to specific and continuous training, the ratio is x 10 (20% in organisations with 50 or more employees, compared to 2% in the smallest organisations).

The main barrier is probably at the entry level, in organisations that need to be attracted to project management from an accessible, practical and didactic point of view, and to be shown the way to further development.

The efforts of the European Commission, with its PM2 methodology, open and free, with an eminently practical approach and a multitude of templates for its implementation, are very appropriate to attract this type of organisations and facilitate their development. Think-TIC, in addition to organising the presentation in Spain, was one of the first national centres to provide training in this methodology, acting as a loudspeaker for the dissemination of this knowledge among professionals in La Rioja.

4. Improving structures and the use and application of methodologies with many inequalities

One of the most encouraging results is the significant **improvement in the structure of organisations to promote better project management**. This indicator recorded the greatest progress in this edition (+0.21), especially in larger companies.

However, 59% of organisations in La Rioja do not have project management structures (an improvement on the 70% recorded in the previous edition) and the presence of project management offices remains at 4%. As a result, this indicator is at a level that can be improved (1.80 out of 5).

The second increase (+0.19) comes from the **use of methodologies**, especially in smaller companies (1 to 9 and 10 to 49 employees).

It is key to highlight the **importance of size in the existence of management structures and the use of methods**. 27% of the smallest enterprises (1 to 9 employees) have some kind of structure, compared with 71% of the largest enterprises (50 or more employees).

This is a factor of 2.5. In the case of methodologies, enterprises with 50 or more employees have a score of 3.58 out of 5, while the rest are around 2.90 out of 5, which makes the difference clear.

At this point, in view of the trend for projects to take on an increasingly predominant role, organisations need to train themselves to manage them better. It is true that the challenges faced by organisations are partly influenced by their size. But it is also true that, in the face of the progressive increase in project work, the ability to manage it successfully will determine the competitiveness of companies, regardless of their size.

This contrasts with the results for knowledge of methodologies, which remain stable (around 2 out of 10 respondents know some methodology). Predictive approaches predominate, accounting for around two-thirds of responses, with PMP® dominating in 50% of cases, compared with 20% for PM2 and Prince2, in line with the results of the previous edition.

How this demand is met will depend on the organisational decisions of each organisation, depending on its resources and priorities.

The possibilities of new technologies, open methodologies, approaches that eliminate internal bureaucracy... make it possible for any organisation, however small, to reach a sufficient level in the way it structures itself to carry out its projects.

5. Innovation and project management go very well together

Los proyectos son la herramienta para hacer realidad los esfuerzos de I+D+i. Así, es natural ver como **las** organizaciones que realizan I+D+i presentan de forma sistemática mayores niveles de madurez en la gestión de sus proyectos.

Es razonable entender que estas organizaciones disfrutan de una doble ventaja. Por un lado, la evidente, derivada de la mejora de sus productos y servicios como fruto de esas innovaciones. Por otro lado, la realización de proyectos de l+D+i incorpora un conocimiento especializado en materia de gestión de proyectos que está a disposición de otras áreas de la organización.

Está clara la imbricación entre la realización de I+D+i y la orientación hacia proyectos para dar ventaja competitiva a las organizaciones. Vemos como el cumplimiento de objetivos en empresas que realizan I+D+i es superior a las que no. Además, se podrá aseverar, como las posibilidades de desarrollo y crecimiento se verán multiplicadas significativamente si los objetivos de los proyectos de I+D+i están perfectamente alineados con los objetivos estratégicos de la organización.

Desde el ThinkTIC se está impulsando un modelo colaborativo entre empresas para el desarrollo de proyectos innovadores y afrontar con éxito los retos futuros. Se pretende que empresas riojanas con menos capacidades y conocimiento en proyectos experimentales e innovación colaboren con otras empresas que si los tienen. Estrategias de innovación abierta para el fortalecimiento del tejido empresarial a través de la internacionalización, la digitalización, la incorporación de tecnologías de la industria 4.0., que se contrastarán en los próximos sondeos.

6. There is a path walked and a long way to go

The main purpose of this report is to serve as a tool for understanding and improving the functioning of organisations in La Rioja.

After this second edition, **we can say we have progressed**. Improvements **have been incorporated** (especially the results of project compliance) that provide useful information. The conclusions of the previous study have also been **evaluated and reaffirmed**. And, in a context as unstable as the one in which we lived, progress has been made in the three dimensions evaluated, as reflected in the final score of the global project management development index **(GDI) of 2.72, which is higher than the previous score of 2.62.**

se ha avanzado en las tres dimensiones evaluadas, tal y como se refleja en el resultado final del índice global de desarrollo de la gestión de proyectos **GDI=2,72, que supera el valor de 2,62 registrado anteriormente**.

Nevertheless, the results obtained show that **a conscious effort is still needed** to develop project management further if we want to have organisations in La Rioja that are able to compete in a project economy.

It is true that the capacities have to be matched to the requirements faced by each type of organisation and no absolute values should be established, but rather relative ones.

But it is no less true that a value of **2.72 out of 5 does not seem to be a sufficient threshold for a future** that will be written in the language of projects. We know that implementation is the fundamental touchstone, because of its influence on the final results and because of its current margin for improvement when compared with the dimensions of perceived capacities and, above all, attitudes.

Finally, thanks to this report, we have an important advantage. We know where we are, we know where we can improve and we have a way of charting our evolution.



Annex 1. Survey questionnaire

1. Indicate the range of income of the establishment concerned in this survey (euros):

- Up to 100.000
- Over 100.000 and up to 500.000
- Over 500.000 and up to 2 million
- Over2 million and up to 10 million
- Over10 million and up to 50 million
- Over50 million
- 2. How would you describe project management in your organization?:
- Use of ad-hoc measures for project management (no specific guidelinesin place)
- O There are some basic project management measures, but usually at the level of the individual project
- In the organization well defined, documented project management procedures are followed
- Standards are applied throughout the organization and common metrics are used
- Continuous improvement of consistent, integrated, established practices
- Don't know

3. How many projects does your organisation manage per year?

- 0 to 5 projects
- 6 to 10 projects
- 11 to 20 projects
- 21 to 50 projects
- More than 50 projects per year
- O Don't know

4. The projects managed in my organisation achieve the objectives originally planned.

- Never
- Hardly ever
- Sometimes
- Often
- Always
- Don't know

5. The projects managed in my organisation fulfil the established deadlines.

- Never
- Hardly ever
- Sometimes
- Often
- Always
- Don't know

6. The projects managed in my organisation fulfil the budget foreseen.

Never

- Hardly ever
- Sometimes
- Often
- Always
- Don't know

7. My organisation has appropriate skills (knowledge and profiles) to manage projects effectively.

- Completely disagree
- Disagree
- Neither agree nor disagree
- Agree
- Completely agree
- Don't know

8. I believe project management improves the functioning of my organization.

- Completely disagree
- Disagree
- Neither agree nor disagree
- Agree
- Completely agree
- Don't know

9. I believe the public authorities should foster the application of project management methodologies.

- Completely disagree
- Disagree
- Neither agree nor disagree
- Agree
- Completely agree
- Don't know

10. Do you habitually use any methodology for managing projects in your organization?

- Never
- Hardly ever
- Sometimes
- Often
- Always
- Don't know

11. What approach do you use for managing projects in your organization? (mark all those that apply).

Predictive (Traditional, detailed planning from the beginning, linear processes)

O Agile (Planning in each iteration, frequent value deliveries, iterative processes)

Hybrid (Combination of the two above)

Other (Please, specify)

I do not use a specific approach

ODon't know

Specify approach (If you checked "Other" in the previous point):

12. Do you know of any methodology or framework for project management (mark all that apply)?

No, I am do not know any methodology

PMI-PMP

O PM2

Prince2

O IPMA

PMI-ACP

Scrum

Other: (Please specify)

ODon't know

13. Do the people who manage projects in your organization receive/have access to specific training in project management.

🔘 No

Basic training (<10 hours)

Intermediate training (10-50 hours)

Specific training (>100 hours)

Specific training and also lifelong learning

On't know

14. Does your organization have any specific structure in the field of project management?

🔘 No

Some staff function as project manager

The professional role of Project Manager exists

There are professional roles and some support for them

There is a Project Management Office (PMO)

ODon't know

15. Does anyone in your organization hold any certificate in any of the project management methodologies?

🔘 No

- 1-25% of the staff
- 26-50%
- 51%-75%
- >75%
- Don't know

16. Has your organization carried out any R+D+i projects in the last 3 years?

- O Yes
- No No
- ODn't know

17. Has your organization participated in R+D+i projects with public funding in the last 3 years?

- (mark all those that apply).
- No
- Yes, regional funding
- Yes, national funding
- 🔘 Yes, European funding
- ODn't know

Do you have any comments or suggestions? (for example, regarding training needs)

Annex 2. The characteristics of the survey and the design of the statistical sample

General characteristics

The survey consists of 17 questions and takes approximately ten minutes to complete.

A. Statistical unit

Observation unit: The basic unit of the survey, to which the data in each questionnaire must refer, is the establishment whose main economic activity is susceptible to being investigated.

The target population of the study is made up of three distinct areas: the Public Sector, the Private Sector and Non-Profit Institutions (NPIs).

The unit of observation has been defined in such a way as to obtain the best information on project management.

In the public sector, the basic unit will be the Councils in the case of the City Councils, the different Services that make up the Regional Government Departments and the Provincial Delegations (or similar) in the case of the General State Administration. The reference framework was provided by the Regional Department of Public Administration and Finance.

In the private sector, an enterprise is defined as any legal unit which constitutes an organisational unit for the production of goods and services and which enjoys a certain degree of autonomy in decision-making, mainly in the use of its current resources.

From a more practical and, where appropriate, more general point of view, the concept of an enterprise corresponds to that of a legal unit, i.e. any natural or legal person whose activity is recognised by law and which is identified by its tax identification number (NIF, in Spanish). An enterprise may carry out one or more activities in one or more local units.

An **establishment** is a unit producing goods or services, which carries out one or more activities of an economic or social nature, under the responsibility of an owner or company, in a place, establishment or set of related establishments situated in a specific topographical location.

If, due to their own characteristics, the activities are not carried out in a fixed location — transport, construction, rentals, cleaning, artistic activities, etc. —, the

establishment is the place from where such activities are organised or coordinated, and may, in the latter case, refer to the registered office or legal domicile of the company or owner.

This group is taken from the Central Register of Enterprises (DIRCE) compiled by the National Statistical Institute.

NPIs can be both non-market producers (controlled by the State or serving households) and market producers (they are then classified as enterprises). Thus, the population of these types of associations comes from the DIRCE and the D.G. of Justice and Home Affairs of the Department of Social Policy, Family, Equality and Justice of the Government of La Rioja.

Unit of informants: Given the characteristics of the variables collected in this survey, the informant units, that is, those to whom the questionnaires are addressed, must be those responsible within the different types of establishments, because they are the ones who know whether or not projects are managed and the need to do so.

B. Scope of the survey

Temporal scope: The survey is initially a pilot project in line with the European Commission's project management initiatives, with a biannual frequency.

Geographical scope: The geographical scope is the Autonomous Community of La Rioja.

Population scope: The target population of the survey is the set of companies with more than 2 employees, considering that companies must have a minimum size to be involved in project management tools, and from these, establishments with employees and activity in La Rioja belonging to sections A, C, D, E, F, F, G, H, I, J, K, L, M, N, O, P, Q, R and S of CNAE-O9 are selected.

A perfect population framework is available through the Central Companies Directory ("DIRCE"), the data provided by the Department of Social Policies, Family, Equality and Justice and the Department of Public Administration and Finance.

The questionnaire is addressed to the person, within the establishment, responsible for project management.

It is important to ensure, through the planning of the collection work, not only the reception of the questionnaire by all those responsible, but also to control personal access to it, through user/password identification systems, personalised links, digital certificates, etc.

C. Survey framework and sample design.

Survey framework: The survey framework is the Directory of Companies and Establishments of the Statistical Institute of La Rioja.

This is an organised register of information with data on the identification, location, territorial distribution and classification by size and economic activity of companies and establishments. The content of the directory comes from administrative sources, and is updated and completed with information from the Central Business Directory ("DIRCE") of the Spanish National Statistics Institute ("INE").

In addition, the registers of Non-Profit Associations and those containing information on local and central government have been used to complete the population of divisions 84 and 94 of CNAE09.

Sample design: The number of establishments in La Rioja on 1 January 2018, susceptible of being selected because they belong to one of the groups of CNAE-09 described above and because they have a size considered, is 5,340.

For the selection of the sample we have opted for stratified random sampling according to establishment size and activity division, combined with a census for larger units. This allows us to assess our target at the extremes of the population, from establishments with 1 to 9 employees to establishments with 50 or more employees. With this technique we obtain a higher statistical precision, as the population of each stratum is homogeneous.

We use stratified sampling combining a fixed part with an allocation proportional to the size of the stratum, gaining precision as the strata are heterogeneous among themselves.

Thus, considering an error of 4.0% and a confidence of 95.0% in each group, we obtain a sample of 1,049 establishments, with 236 establishments with 50 or more employees belonging to the exhaustive study.

The sample would be as follows:

Division CNAEO9		Number of employees					
	TOTAL	1-9	10 – 49	50 or more			
016-024 (A)	3	1	1	1			
10, 11 y 12 (C)	59	22	11	26			
13 -14-15 (C)	32	8	91	5			
16-17-18-31(C)	27	8	6	13			
19-20-21 (C)	5	2	1	2			
22-23(C)	18	5	5	8			
24-25(C)	22	8	5	9			
26-27-28(C)	12	3	2	7			
29-30(C)	7	0	1	6			
32-33(C)	3	2	2	0			
35 (D)-36-37-38-39 (E)	6	2	1	2			
41-43 (F)	45	29	10	6			
45 (G)	17	13	4	0			
46(G)	58	38	11	9			
47 (G)	79	60	6	12			
49-50-51-52-53(H)	27	14	6	7			
55-56 (I)	66	53	6	7			
58-59-60-61-62-63(J)	10	4	2	4			
64-65-66(К)	24	21	3	0			
68 (L) -69-70-71-72-73-74-75 (M)	31	27	5	0			
77-78-79-80-81-82 (N)	44	14	7	23			
85 (P)	30	9	4	17			
86-87-88 (Q)	36	11	4	21			
90-91-92-93(R)-95-96(S)	26	17	4	5			
94 (S)	45	27	6	12			
84 (0)	42	71	0	24			
TOTAL	772	404	132	236			





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